



San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT

AUG 21 2012

Gerardo C. Rios, Chief
Permits Office (AIR-3)
U.S. EPA - Region IX
75 Hawthorne St
San Francisco, CA 94105

**Re: Notice of Final Action - Minor Title V Permit Modification
District Facility # S-1543
Project # S-1121741**

Dear Mr. Rios:

The Air Pollution Control Officer has modified the Title V permit for Aera Energy, LLC by incorporating Authorities to Construct S-1543-5-15 and '6-16. These ATCs administratively changed the turbines' emissions factors from lb/hour to lb/MMBtu.

Enclosed is the modified Title V permit. The application and proposal were sent to US EPA Region IX on June 21, 2012. No comments were received following the District's preliminary decision on this project.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Sincerely,

David Warner
Director of Permit Services

DW:sdd

Enclosures

Sayed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061
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Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: (661) 392-5500 FAX: (661) 392-5585



San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT

AUG 21 2012

Brent Winn
Aera Energy, LLC
PO Box 11164
Bakersfield, CA 93389-1164

Re: Notice of Final Action - Minor Title V Permit Modification
District Facility # S-1543
Project # S-1121741

Dear Mr. Winn:

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Sincerely,

A handwritten signature in black ink, appearing to read "David Warner".

David Warner
Director of Permit Services

DW:sdd

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1543-5-16

EXPIRATION DATE: 05/31/2016

SECTION: 32 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

13.6 MMBTU/HR GAS-FIRED SOLAR SATURN GAS TURBINE ENGINE/COMPRESSOR WITH GAS FIRED 5.9 MMBTU/HR DUCT BURNER DRIVING GAS COMPRESSOR SERVED BY CATASTAK TM SELECTIVE CATALYST REDUCTION (SCR) SYSTEM - OPERATION A

PERMIT UNIT REQUIREMENTS

1. Operation shall include fuel gas piping from inlet scrubber MS-101 and inlet water knockout vessel MS-102, and compressor discharge piping to knockout vessel MS-301. [District Rule 2010, 4.0] Federally Enforceable Through Title V Permit
2. Fugitive volatile organic compound (VOC) emission sources shall be inspected, repaired, and maintained such that the total stationary source VOC emission rate does not exceed the stationary source limit specified in permit S-1543-4. [District NSR Rule] Federally Enforceable Through Title V Permit
3. "Startup" and "shutdown" of gas turbine engine and/or duct burner, defined in 40CFR 60.2, shall not exceed a time period of two hours for each occurrence. [District Rules 2080, 3.0 and 4703, 3.25] Federally Enforceable Through Title V Permit
4. Total gas consumption rate for gas turbine engine/compressor and duct burner shall not exceed 468 MMBtu/day. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Total gas consumption rate for gas turbine engine/compressors S-1543-5 and S-1543-6 and waste gas flare S-1543-7 shall not exceed 1,601,176 scf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Gas turbine engine with duct burner on emission rates shall not exceed any of the following: NOx (as NO2): 9 ppmv @ 15% O2 or 0.0332 lb-NOx/MMBtu, SOx (as SO2): 0.0205 lb-SOx/MMBtu, PM10: 0.0918 lb-PM10/MMBtu, CO: 250 ppmv @ 15% O2 or 0.5605 lb-CO/MMBtu, or VOC: 0.0118 lb-VOC/MMBtu. [District NSR Rule, District Rule 4703, 5.1.2 and 5.2, and 40 CFR 60.332(c)] Federally Enforceable Through Title V Permit
7. Gas turbine engine with duct burner off emission rates shall not exceed any of the following: NOx (as NO2): 9 ppmv @ 15% O2 or 0.0332 lb-NOx/MMBtu, SOx (as SO2): 0.0279 lb-SOx/MMBtu, PM10: 0.1287 lb-PM10/MMBtu, CO: 250 ppmv @ 15% O2 or 0.5605 lb-CO/MMBtu, or VOC: 0.0147 lb-VOC/MMBtu. [District NSR Rule, District Rule 4703, 5.1.2 and 5.2, and 40 CFR 60.332(c)] Federally Enforceable Through Title V Permit
8. The ammonia (NH3) emissions from the exhaust of the SCR system serving this gas turbine shall not exceed 20 ppmvd @ 15% O2. [District Rule 4102]
9. Permittee shall maintain accurate records of weekly fuel gas sulfur content (as H2S) and shall make such records available for District inspection for five years. Draeger tubes may be utilized to satisfy this monitoring requirement. [District NSR Rule and Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. Permittee shall maintain accurate daily records of total gas consumed in S-1543-5, '6, and '7, and such records shall be made readily available for District inspection upon request for a period of five years. [District NSR Rule and Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

11. Compliance with NO_x, CO, and NH₃ emission limits shall be demonstrated annually by District witnessed sample collection by independent laboratory. If duct burner is operated intermittently, compliance shall be demonstrated with duct burner both on and off. [District Rule 4703, 6.3.1 and 6.3.3] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081, 5.0, 6.0, and 7.1] Federally Enforceable Through Title V Permit
13. The following methods shall be used for testing required by this permit: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, Stack gas Oxygen - EPA Method 3 or 3A or ARB Method 100, SO_x (lb/MMBtu) - ARB Method 100 or EPA Method 6 or fuel gas sulfur content analysis and EPA Method 19, Fuel gas sulfur content - ASTM D3246 or double GC for H₂S and Mercaptans, Fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588, Ammonia slip - BAAQMD method ST-1B. [District Rules 1081; 40 CFR 60.8(a); and 4703, 6.4] Federally Enforceable Through Title V Permit
14. The permittee shall monitor and record the stack concentration of NO_x, CO, NH₃ and O₂ at least once during each month in which source testing is not performed. NO_x, CO and O₂ monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH₃ monitoring shall be conducted utilizing Draeger tubes or a District approved equivalent method. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless it has been performed within the last month. [District Rule 4703] Federally Enforceable Through Title V Permit
15. If the NO_x, CO or NH₃ concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4703] Federally Enforceable Through Title V Permit
16. All NO_x, CO, O₂ and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NO_x, CO and O₂ analyzer as well as the NH₃ emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4703] Federally Enforceable Through Title V Permit
17. Ammonia emission readings shall be conducted at the time the NO_x, CO and O₂ readings are taken. The readings shall be converted to ppmvd @ 15% O₂. [District Rule 4703] Federally Enforceable Through Title V Permit
18. The permittee shall maintain records of: (1) the date and time of NO_x, CO, NH₃ and O₂ measurements, (2) the O₂ concentration in percent by volume and the measured NO_x, CO and NH₃ concentrations corrected to 15% O₂, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH₃ emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rule 4703] Federally Enforceable Through Title V Permit
19. This unit shall be fired exclusively on natural gas which has a sulfur content of less than or equal to 0.015% by weight (75 ppmv as S). [40 CFR 60.333(b) and subpart GG; District Rule 4801, 3.1; and Kern County Rule 407] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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20. If this unit is not fired on natural gas certified by the supplier to have a sulfur content (as S) not exceeding 0.015% by weight, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
21. If this unit is not fired on supplier-certified natural gas, the operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(j)(2)] Federally Enforceable Through Title V Permit
22. If this unit is not fired on supplier-certified natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 4084 or D 3246 or double GC for H₂S and mercaptans. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
23. If this unit is fired on supplier-certified natural gas, then copies of fuel certifications (or specifications) and natural gas bills shall be maintained on file. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1543-6-17

EXPIRATION DATE: 05/31/2016

SECTION: 32 **TOWNSHIP:** 28S **RANGE:** 21E

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